Akademik mükəmməlliyə doğru: ADA Universitetinin zəif nəticə göstərən bəzi tələbələri arasında aparılan tədqiqat

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Açar sözlər:

Ali təhsil, akademik göstəricilər, bakalavrlar

Annotasiya. Akademik mükəmməllik ali təhsil ocaqlarının prioritetlərindən biri olduğuna görə, aşağı akademik göstəricilərin səbəblərini araşdırmaq, təhlil etmək və bu səbəbləri aradan qaldırmağa səy göstərmək çox vacibdir. Bu tədqiqat işinin əsas məqsədi Azərbaycanın paytaxtı Bakı şəhərində yerləşən ADA Universitetində təhsil alan aşağı akademik göstəriciləri olan tələbələrin akademik nəticələrinin səbəblərini izah etməkdir. Araşdırmada qarışıq tədqiqat metodları istifadə olunub. Əldə olunmuş xarici səbəblərə: ənənəvi təlim metodları, tam orta təhsil, individual yanaşmaya ehtiyac, bəzi qiymətləndirmə mexanizmləri və ingilis dili biliyinin səviyyəsi daxildir. Daxili səbəblər kateqoriyasına isə həmin tələbələrin aşağı nəticə göstərmələri, öyrənmə bacarıqlarının olmaması və ümumtəhsil fənlərini «artıq səy mənbəyi» hesab etmələri daxildir. Tədqiqat işində hər iki kateqoriyaya — həm daxili, həm xarici səbəblərə aid təkliflər öz yerini tapmışdır.

Striving for excellence: An explanatory study on determinants of poor University performance of ADA University students

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Abstract. Since 'academic excellence' is one of the core values of higher educational institutions, it is imperative that universities strive to understand the reasons behind poor university performance and find the ways of improving it. The purpose of the present study is to explain the reasons that determine poor performance of undergraduate students at ADA University, situated in the capital of Azerbaijan, Baku. The study employed a mixed method of research, the major one of them being qualitative. The revealed extrinsic determinants include traditional teaching methods, secondary and high school education, need for individualized teaching practices, some assessment mechanisms of the University, and the English language. The intrinsic category of determinants, in its turn, includes low effort of undergraduate students of ADA University, lacking learning and study skills, and considering General Education subjects irrelevant. The suggestions of the study are made with reference to both intrinsic and extrinsic motivation.

Strong men believe in cause and effect.
Ralph Waldo Emerson

Introduction

When Azerbaijan gained independence in 1991, notwithstanding numerous challenges, nearly all sectors in the country opened up for the long-awaited changes. As the transition to the market economy thrived in the last three decades, the concepts such as 'reformation' and 'transformation' came into play. Accordingly, the field of education was no exception with regards to these changes. A significant number of reforms have been and are to be implemented to address the challenges imposed by these processes. Gone are the days when educational system would carry Soviet ideological bias in every aspect. On this path of fundamental changes, the field of higher education seems to be one of the key players to integrate with the globalized world.

Nevertheless, not all tertiary institutions of the country seem to be capable and or willing to keep up with the worldwide progress trends in higher education to enhance academic quality. ADA University was one of the higher educational institutions of Azerbaijan which introduced and initiated a number of progressive Western practices in the context of higher education, which could be considered innovations for the country. Established in 2006 with seven undergraduate and five graduate degrees, the University is aiming 'to cultivate highly intellectual solution providers who are closely collaborating, effectively communicating members of global community with ethics and sense of citizenship' (ADA University Academic Catalogue 2017). As stated in the Mission, Vision and Values Statement of the University, ADA attempts to be 'a world class Azerbaijani university'.

With regards to the education system of ADA, the University seems to follow a grading system that is not similar to that of other local tertiary institutions, which is more akin to Western grading system. 2.00 grade point average is the minimum requirement cumulatively and in major subjects for undergraduate students, which makes a student eligible to enrol in other classes and implies that a student holds Good Academic Standing. If this requirement is not fulfilled, a student could be a subject to 'a warning, probation, or dismissal' (ADA University Academic Catalogue 2017, 2017).

It must also be noted that unlike other state universities of the country, ADA does not provide entirely free education. It has tuition fees that could be considered relatively high in comparison with other state tertiary institutions. Nevertheless, the University does have a scholarship policy for incoming and returning students which is aimed at motivating students to enhance their academic results. For incoming students, merit-based scholarships are offered to those who have scored 650 or higher, while for returning students the requirement is 3.00 grade point average and higher by which they are eligible to receive waivers off their semester tuition. To be more precise, students with 4.0 grade point average are granted with 100% tuition fee waiver, the ones scoring in the 10% and next 10% of each program cohort receive 50% and 25% waiver off their tuition fee respectively (ADA University Academic Catalogue 2017).

Also, recently, the University has established a Centre for Student Support and Academic Counselling, the ultimate goal of which is to help students improve the quality of their academic performance and ensure high student retention and provide preventive activities as well. Students are supposed to apply to the Centre when they struggle with studies and need extra support in course selection.

In spite of such extrinsic motivators, a considerable number of students at ADA fail to keep up with the academic competition, and either receives a warning, put on probation or are dismissed. For instance, for Fall semester of the academic year 2017-2018, 12% of

students scored less than 2.0 grade point average.

Generally, with this research, I aspire to address the question of the poor academic performance at this higher educational institution. The purpose of the present study is to explain the reasons that determine poor performance of undergraduate students at ADA University. Here, by 'poor performance' I imply grade point average of 2 and below. Since 'academic excellence' is one of the core values of the University, it is imperative that the educational institution strive to understand the reasons behind poor performance and find the ways of improving it. In the existing literature, poor university performance is usually attributed to low motivation levels, financial status, and varying learning styles of students. However, I assume it to be an interplay of several variables, and I am interested which of the determining factors of poor performance is dominant among ADA University students. Accordingly, the main research questions that I will attempt to answer in this thesis are:

What are the determining factors of poor performance of ADA University Students?

Which determinant factor is the dominant with regard to poor performance of ADA University Students?

How can university improve support to poorly performing students to excel academically?

How can the results of this specific study be considered for the broader context of education?

I attempted to shed light on these questions by interviews conducted with university administrators, as well as General Education instructors and professors in addition to surveys with undergraduate students of ADA University. Having explained the main reasons of poor performance, I attempted to offer the ways of improving poor performance of students. Based on the identified results, I provided suggestions how motivation levels of students can be increased through university practices and on how ADA university can ac-commodate learning styles of various groups of students.

Furthermore, while discussing educational background of students, I have used the official rating of secondary schools of Azerbaijan and compared it with my own results, which have certain implications for the quality of pre-tertiary education as well.

Accordingly, I formulated the following hypotheses:

Hypothesis 1: Poor performance of ADA students is explained by low extrinsic motivation.

Hypothesis 2: Poor performance of ADA students is explained by low intrinsic motivation.

Hypothesis 3: Poor performance of ADA students is explained by unsatisfactory educational quality of secondary schools.

Hypothesis 4: Poor performance of ADA students is explained by the low level of the English language knowledge.

Hypothesis 5: Poor performance of ADA students is explained by varying learning styles of students which is not favoured by university policies and instruction.

Hypothesis 6: The dominating determinant of academic performance is extrinsic motivation provided by university and instructors.

Here, by 'extrinsic motivation', I imply support and influence provided by university as well as the parents of undergraduate students, and knowledge and skills having been acquired in the years of pre-tertiary education. Accordingly, by 'intrinsic motivation', I suppose intrinsic inclination of students towards academic performance such as wishing to study at this specific university, being psychologically ready for the challenges imposed by university study.

Literature Review

General Overview of the Problem

In the existing literature, the concepts of 'academic performance' and 'academic

achievement' seem to be interchangeably used. One source (Ricarda Steinmayr, 2014), for example, defines the terms as 'outcomes' achieved in instructional settings.

In their article, Kirschner and Karpinski (2010) discuss the ambiguity over the concept of 'academic performance':

...how is academic performance defined? Should GPA or letter equivalents (e.g., A, B, C, D, F) be used? If letter equivalents are used, how should they be coded? Are other measures involved in academic performance such as amount of time spent studying, and for what length of time should "time spent studying" be observed (e.g., one day, a week, a month)? Additionally, academic performance is conceptualized differently not only between schools, but also across states, and even countries. How can the construct of academic performance be accurately defined and measured with such diversity in operational definitions? (p.1241)

A natural question arises out of this discussion of the concept of 'academic performance': 'Why should higher education institutions be so much concerned with academic performance of students?' In the renowned classical work 'The Idea of the University' by John Henry Newman, the author provides the definition of 'the business of a university', which could shed some light to our question. He states that providing training according to certain standards and 'to help forward all students towards it' is the major 'business of the university' (as cited in Pelikan, 1992, p.71). In this definition, the second part i.e. 'to help forward all students towards training based on certain standards' could be of particular interest to our discussion. It basically implies that all students studying at an educational institution should be pushed towards 'academic excellency' by the university governance. A study conducted by a group of researchers at the University of Hong Kong (Kember, Ho, & Hong, 2010) points out that in order to transform into 'knowledge-based economies' (p. 263) countries should provide a particular care and attention to the prosperity of knowl-

edge and skills of their undergraduate and graduate students.

But how to achieve this 'academic excellency'? Gibbs (2015) refers to the philosophical tenets of this question and cites Aristotle's *Metaphysics* where the ancient philosopher introduces the notions of *dynamic* (potential based on capacity) and *energeia* (action) and states that 'a thing can act only when it is acting, and when it is not acting it cannot act' (Gibbs, 2015, p. 50). Gibbs then relates this thought to the performance of modern universities by claiming that to achieve academic excellence, universities should put a particular emphasis on developing learning skills of their students.

Based on the relevant body of sources, it should be stated that overall, in modern research practice, the subject of academic performance has been studied mainly in the context of pre-tertiary education. In comparison with scientific studies on schools, there exists relatively fewer number of research works having been conducted among college level students, which was emphasized by the authors themselves as well: 'There are relatively fewer studies of college students in the higher education stage and there are no unified conclusions' (Yao, Peng, & Zhimin, 2015, p. 82). Regarding the conclusions of pre-tertiary studies on determinants of academic success, Etsey (2005), for example, having studied causes of low performance at primary schools, highlights that in primary schools, the main reasons for low performance are usually the effectiveness of teaching, quality of teaching materials, class size and intrinsic motivation of schoolchildren.

With regards to the determinants of academic outcome of university students, although the number of such studies is relatively few, a broad array of determinants of academic performance seems to have been studied in this context. Traditionally, academic success has been related to intelligence levels of students. Good examples of such classic studies could be the ones by Brody (2000) and

Gottfredson (2003) and Kuncel, Hezlett and Ones (2001) (as cited in Sheard, 2009). Nevertheless, a considerable amount of contemporary studies nowadays, relate academic performance to more external factors in educational and family settings rather than innate capabilities and intelligence levels of people. Most of such sources present very similar findings regarding to variables such as age, gender, socio-economic status of families, educational background, learning capabilities and strategies of students.

Previous Educational Experience of Students and Academic Performance

Among the determinants of academic performance researched, previous schooling effects seem to have been most widely investigated (Anderson, Dwayne, & Melvyn, 1994; Messinis & Sheehan, 2015; Niu & Tienda, 2009; Oksanen & Byron, 1975; Mora & Escardibul, 2008; Eskew, 1988; Mckenzie & Schweitzer, 2001). For instance, Eskew (1988) and Messinis (2015) have conducted a research on some determinants of student performance in the first college level. Based on multiple regression analysis conducted at Purdue University, Eskew (1988) concludes that high school grade records are one of the determinants of pivotal importance for undergraduate students and suggests that adolescents should be exposed to college-related courses as of their school years to achieve better academic results. Messinis (2015), in his turn, referring to a quantile regression model proposes that the evidence with regards to the significance of academic background can be very useful in the analysis of high school rankings. Another interesting finding belongs to Mora and Escardibul (2008) where they argue that the students with private school background demonstrate better academic performance in comparison with the ones coming from public schools.

Admission Records and Academic Performance

In addition, admission information of students was also one of the variables to have been investigated with this regard. The predictive validity of admission records also has been confirmed mainly in studies undertaken by western scholars (Dunlap et.al, 1998; Gupta & Turek, 2015; Mercer et.al, 2011). In a great majority of such studies, the subject has been researched with regards to its correlation with academic records at university level, which is corresponding to my study. Both graduate (Dunlap, 1998; Wamala, 2016; Gupta & Turek, 2015) and undergraduate students (Mercer et al., 2011) have been subjects of studies of this type. The admission criteria having been analyzed include previous academic records of students i.e. undergraduate grade point average for master level students (Dunlap, 1998; Gupta & Turek, 2015) and high school grade point average for college students (Mercer, 2011), specific aptitude exams such as GRE and SAT (Dunlap, 1998; Gupta & Turek, 2015), specialization exams (Wamala, 2016; Mercer, 2011), interviews (Mercer, 2011) and previous work experience (Dunlap, 1998;).

While most of these authors having studied these admission systems concluded that the correlation between admission criteria and university grades seems to be considerably strong (Dunlap, 1998; Mercer, 2011, Gupta & Turek, 2015) a minor group of scholars (for example, Wamala, 2016) claim this relationship to be not considerable. For example, in a research conducted on Australian college level students Mercer (2011) having studied the records of 1174 students enrolled in the years from 1999 through 2009 has concluded that admission interviews are strongly correlated both with the academic and clinical achievements of students. In contrast, Wamala (2016) who researched 815 students at Makerere University denies the existence of correlation between admission tests and university students' achievement.

Family and Academic Performance

Another broadly discussed determinant regarding 'academic performance of university students' seems to be the phenomenon of 'family'. The famous and interesting 'Coleman Report' by the American sociologist professor James Coleman made in 1966 has been cited by many of the contemporary studies: 'the main factors that affect students' grades do not come from the school, but from the family' (as cited in Yao, Peng, & Zhimin, 2015). With regards to family, two aspects of this indicator appear to have been widely discussed in the existing literature i.e. educational level of families, in particular that of parents and socio-economic status of families (for example, Yao, Peng, & Zhimin, 2015; Hansen & Mastekaasa, 2006; Messinis & Sheehan, 2015; Koch, 2016). Some studies review and treat them together, while some consider these determinants as separate indicators. For instance, while Hansen and Mastekaasa (2006) review the problem from the perspective of social origins of families, Yao and Peng (2015) have conducted an empirical study on the effect of family capital on university students. A study conducted by Koch (2016) reviews educational level of parents and socio-economic status of families together and concludes that lack of financial means is a significant indicator of students' academic performance at university.

Motivation

As Afzal states 'learning sometimes becomes compulsion than pleasure, that's why large number of students leaves education before graduation' (Afzal, Ali, Khan, & Hamid, 2010, p. 81). With this regard, usually the subject of 'student motivation' usually comes into play. A significant number of studies could be found investigating university students' motivation as a predictor and determinant of academic performance (for example, Afzal, Ali, Khan, & Hamid, 2010; procr, Ho, & Hong, 2010; Erdinç & Balkis, 2017; Henning,

Krageloh, & Wong-Toi, 2015). Most of such studies share the same or similar findings with regards to the importance of motivation in the process of learning, emphasizing the significance of motivation.

A very interesting and thought-provoking finding has been proposed by Deci in 1971 has been very controversial in the educational community. The authors basically assert that external motivators have the potential to undermine internal motivation of learners (Deci, Koestner, & Ryan, 2001). However, the findings have been claimed to be flawed by some authors such as Cameron and Pierce.

Faculty Development

Since the present study reviews the subject of improving teaching and administrative practices based on Multiple Intelligences Theory, some sources have been reviewed with this regard. In an interesting study titled 'One Size Fits All?', the researcher suggests that teaching and learning practices at universities should be transformed applying new pedagogical approach based on Multiple Intelligences Theory (Jones, 2017). The author claims that the area of 'personal intelligences' i.e. intra- and interpersonal intelligences have remained neglected in the sphere of education so far. The study suggests incorporating those type of intelligences in establishing curricula of higher education institutions.

Other Factors

In addition to the abovementioned well-known factors on the determinants of academic performance of undergraduate students that have been largely investigated by many of educational researchers, there a number of other factors that have been given a limited attention and discussed in a relatively fewer number of research works. Among other factors that have been discussed in the literature to a limited extent, the following subjects and/ or determinants could be men-

tioned: the effect of the English language knowledge (for instance, Rooy & Rooy, 2015), extracurricular activities that students engage (for example, Seow & Pan, 2014), home-school distance (for instance, Koch, 2016), access to the Internet (for example, Nyikahadzoi, Matamande, Taderera, & Mandimika), the theory of Self-efficacy (for example, Köseoğlu, 2015; Gyst & Mitchell, 1992; Fenollar, Roman, & J., 2007; Erdinç & Balkis, 2017; Gębka, 2014), class-sizes at universities (for example, Fenollar, Roman, & J., 2007), and grit of undergraduate students (for instance, Mason, 2018).

For instance, a study conducted at a South African University, where academic performance seems to be a concerning issue language testing examinations on the English language turned out to possess strong predictive validity for further academic accomplishments of university students (Rooy & Rooy, 2015).

Besides the abovementioned determinant, extracurricular activities of students have also been viewed as one of the determinants of academic performance. With this regard, there are three directions of research which are reflected in three major theoretical frameworks: zero-sum, developmental and threshold theories (Seow & Pan, 2014). According to zero-sum framework, extracurricular activities of students yield an utterly negative impact on their academic achievements. On the contrary, while developmental framework argues that the effect of such activities on academic performance is positive, threshold framework claims that extracurricular activities could yield beneficial effects to a certain extent depending on type of the activity (Seow & Pan, 2014). Also, some authors differentiate between 'structured' and 'unstructured' extracurricular activities, claiming that the latter does not yield any beneficial effect for the academic achievement of students (for example, Broh, 2002).

Another very popular subject discussed with regards to academic achievement of university students is the theory of Self-efficacy initially suggested by the social scientist Albert Bandura (for example, Köseoğlu, 2015; Gyst & Mitchell, 1992; Fenollar, Roman, & J., 2007, Duru & Balkis, 2017; Gębka, 2014 to name just a few of such educational researches). Generally, in the sphere of social and mangerial sciences, the theory of Self-efficacy is also termed as social cognitive theory or social learning theory (Robbins & Judge, 2013) . Gyst and Mitchell regard self-efficacy as a construct acquired from social cognitive theory by the same author i.e. Albert Bandura. Basically, it should be noted that the theory of Self-efficacy implies that a person with a higher level of self-effiacy is more likely to be more successful in various types of situations. Robbins (2013) defines self-efficacy as 'an individual's belief that he or she is capable of performing a task' (p.215). However, it should be mentioned that the current research work is not aspiring to utilize the theory of Self-efficacy as the major theoretical reference due to the fact that the theory of Self-efficacy is referred in the educational research works with an orientation of psychology. Since the current research work does not attempt to respond to the psychological aspects of the discussed problem on the determinants of academic achievement, I consider this theory not to be relevant for the purposes of the present master thesis. With regards to the findings of educational research works on the theory of self-efficacy, very interesting studies could be mentioned. Köseoğlu (2015), for instance, found that undergraduate students possessing low levels of self-efficacy tend to think that the level of intelligence possessed by people surrounding them is usually acquired innately, and people do not usually change their intelligence levels, and achieve better accordingly.

Interestingly, the subject of 'class size' not only has been studied in the domain of pre-tertiary education i.e. with regards to schools, but also some studies have been conducted with reference to university class sizes as well, in spite of the fact that the number of such works related to university studies is comparatively less than the latter. An integrative

conceptual framework suggested by Fenollar, Roman, and Cuestas (2007) confirms that when the size of classes at universities decrease, it exhibits considerable positive effects on academic performance of university students.

In the existing literature, the concept of 'grit' is another important concept having been discussed in psychology oriented educational research works on the determinants of academic performance of undergraduate students. With this regard, Mason (2018) defines the concept of grit as 'perseverance of effort and consistency of interest' (p.66). He used a simple regression test to identify the relationship between grit and academic performance of undergraduate students (using Grit Scale prepared by the author and the records of grade point average of undergraduate students). The author concludes as a result of his empirical research work having been conducted on a group of South African students, the concept of grit turned out to be a crucial factor explaining academic performance of undergraduate students (Mason, 2018).

To sum up, a number of themes based on the reviewed academic articles and books could be identified concerning the subject of academic performance of university students. While some determinants such as family and previous education of students, predictive validity of admission results of undergraduate students, motivation and faculty development could be regarded as 'popular' topics, others i.e. access to the Internet, language level, extracurricular activities and grit seem to have been studied in a limited manner in the domain of educational research. Also, it should be emphasized that in spite of the fact that the theory of self-efficacy suggested by Albert Bandura seems to be a well-known topic with regards to the determinants of academic achievement of undergraduate students, the theory being psychologically oriented, did not suit the purposes of the current research work on the determinants of academic performance of undergraduate students of ADA university.

Azerbaijan and some Caucasian countries

In Azerbaijan, there seems to be a huge gap in the area of educational research on this particular subject i.e. determinants of academic performance. Although there do exist some research papers devoted to the sphere of higher education in general, almost no research could be found with regards to academic performance of university students. The studies devoted to universities in Azerbaijan claim that the overall the system of higher education is corrupted with low-quality of education that does not correspond to the demands of modern job market (Guliyev, 2016), bribes (Silova, Johnson, & Johnson, 2007) and underqualified instructors (Guliyev, 2016; Silova, Johnson, & Johnson, 2007).

With regards to the university admission system in the country, which is one of the focus points of the present study, the history of modern centralized matriculation system, similar to that of neighboring countries (Chankseliani, 2013a), is closely linked to socio-economical and historical transformation processes that the country has experienced after the collapse of the soviet regime. Often, the predecessor of the current system tends to be described as an unfair and highly subjective one, which had paved the way for corruption and nepotism in university entrance examinations (Aliyev, 2011). A new centralized admission system based on standardized tests was adopted in 1992 having gained independence of the Soviet regime (Mərdanov, 2012). It is generally considered to be a fair and objective system which has established equal exam conditions for everyone and provided a solution to the problems of educational corruption and nepotism in admissions (Aliyev,2011).

A centralized admissions system has also been applied in the neighboring post-soviet country Georgia since 2005, which has been an object of severe criticisms of most scholars favoring democratic selection in higher edu-

cation entrance. As an example, Chankseliani (2013a; 2013b) discusses class and regional disadvantages favored by the meritocratic system of university admissions. In one of these articles, focusing on the barriers of rural population, the author makes a distinction between the terms of equality and equity. Thus, it is explained that while an equal system treats all the applicants in the same manner, equity ensures that the differences (class, regional, educational background) of the students are considered as well. The author asserts that admissions of Georgia are highly meritocratic, preventing social mobility and encouraging disparities of classes. A similar argument has been presented with regards to Azerbaijan by Guliyev (2015) in his article 'The Quality of Education in Azerbaijan: Problems and Prospects'. The author mentions that on average, a university applicant's family has to invest AZN 3000 for university preparation tutoring.

Although there exists considerable amount of criticism towards university admissions in Azerbaijani society, there seems to be not sufficient number of scholars interested in conducting an empirical research on the issue. As one example of the limited number of these local researchers, Aliyev (2011) has challenged equity opportunities of university applicants in one of the articles. It is argued that the sphere of higher education in Azerbaijan has not been a subject to significant positive improvement that yield equitable entry to the field. Here, equity is investigated in terms of rural and urban areas as well as gender issues. National university admission examination is acknowledged as a fair system which eradicated corruption in admissions. However, it is not recognized as an effective tool to provide equity. Through different sources of statistical data analyzed (World Bank, State Statistical Committee, State Student Admission Commission, Economic Research Centre) the researcher concludes that there are serious gaps that signal inequity with regards to different areas. For instance, the cities of Baku and Sumgayit are the most crucial contributors to the number of students admitted yearly. It is mainly explained by the fact that urban and rural areas differ in terms of quality of secondary education which is linked to human resource gaps in teaching cadres. In terms of gender issues, however, the author observes certain positive changes in the recent years related to female application to higher education albeit being in minority in admissions and certain spheres such as engineering, business and technology. It is suggested that the government adopt appropriate evidence and research-oriented policies to foster equity development in the sphere.

All the results of geographical literature review summed up, it could be seen that research in developed countries managed to disclose a great number of distinctive attributes of academic performance in higher educational institutions. On the other hand, developing countries such as Azerbaijan still remain to be 'a fertile uncultivated ground' for educational research on this particular topic.

Theories

This study is framed by the theory of Multiple Intelligences by Howard Gardner (2011) and the theory of 'Self-determination' on motivation.

A number of taxonomies have been offered by different scholars regarding the theory of 'Multiple Intelligences'. However, the greatest impact in this domain seems to have been made by Harvard Professor Howard Gardner and his theory of 'Multiple Intelligences' (MI Theory). In his book *Frames of Mind*, Gardner (2011) listed seven types of intelligences: *linguistic, logical-mathematical, musical, spatial, bodily-kinesthetic, interpersonal, intrapersonal, and naturalist-ecological* (Gardner, 2011).

Similarly, practitioners of neuroscience assert that there are different preferred styles of learning labelled 'VAKOG' which stands for *Visual (learn by seeing), Auditory (learn by listening), Kinesthetic (learn by touching), Olfac-*

tory (learn by smelling), and Gustatory (learn by tasting) (Harmer, 2001). Neuro-linguists have reduced this classification by omitting the last two of the types and refer to it as 'VAK' – *Visual, Auditory, Kinesthetic* in language teaching contexts. Harmer suggests it is necessary that instructors ensure the balance of activities which accommodate various learning styles through a course: 'We will want to offer activities which favour, at different times, students with different learning styles' (Harmer, 2001, p. 49)

New generation of neuroscientists argue that there is no scientific evidence supporting the theory, and the whole idea is totally unhelpful for instructors. Hattie (2014) claims that although we, humans, do have various mental and sensory preferences, the knowledge of these styles could hardly be of any use for instructors. He also questions the validity of learning style questionnaires, and says that self-reports in such questionnaires cannot objectively reflect a person's learning preferences.

Harmer (2001) defines motivation as 'some kind of internal drive that pushes someone to do things in order to achieve something' (p.51). There are a number of theories on motivation which could be related to the managerial and educational spheres. For instance, famous motivational theories such as Maslow's Hierarchy of Needs, Two-Factor Theory, McClelleand's Theory of Needs, Self-Efficacy Theory by Bandura could be remarkable instances of such theories (Robbins & Judge, 2013).

With respect to self-determination theory, it is proposed that if a person is obliged to accomplish a task, the quality of performance will be undermined, and people need to be internally motivated to perform tasks in a better manner (Robbins & Judge, 2013). Accordingly, the theory of self determination suggests that the phenomenon of motivation can be classified as intrinc and extrinsic. Extrinsic motivation develops due to an array of outside factors, while intrinsic motivation 'comes from

within the individual' (Harmer, 2001, p. 51).

As mentioned earlier, some defenders of self-determination theory assert that extrinsic motivators diminish internal motivation of people (Robbins & Judge, 2013):

If you're reading a novel a week because your English literature instructor requires you to, you can attribute your reading behavior to an external source. However, if you find yourself continuing to read a novel a week after the course is over, your natural inclination is to say, I must enjoy reading novels because I'm still reading one a week (p.209).

To conclude, using various psychological and social theories to improve educational outcomes seems to be a widely accepted practice worldwide. The present study will review Multiple Intelligences Theory and Self-Determination Theory to discuss opportunities for improvement in teaching and administrative practices of ADA University.

Methodology

Data collection

The study employed a mixed method of research, the major one of them being qualitative. Fieldwork for the present research was conducted in the year 2018, in Baku, Azerbaijan at the university of ADA.

Interviews

Approximately fifteen interviews were conducted with university administrators and instructors of General Education from School of Education at ADA university. All the interviews conducted were semi-structured. The questions were broad and open-ended, by which I attempted to encourage the interviewees to elaborate further on their answers. The questions asked by me were structured based on the two theories utilized in the present research work i.e. the Theory of Self Determination (intrinsic and extrinsic motivation for low performing students) and the Theory of

Multiple Intelligences (individual learning styles and their application in the process of teaching).

With respect to Self-determination Theory, two types of questions were created i.e.one group of questions were supposed to identify the level of intrinsic motivation of students. Accordingly, the other group of the questions included the ones targeted to identify the level of extrinsic motivation of the low achieving learners provided by ADA University and instructors for achieving academic success. Regarding the theory of Multiple Intelligences, the content of the questions was based on the concept of 'individual learning styles' (visual, auditory, kinaesthetic). It should be noted that the definition of the concept of 'learning styles' was provided during the process of interview for the university administrators and/ or instructors who were not acquainted with the concept.

The following chart/figure has been created based on the interview findings.

Surveys

Concerning the quantitative analysis of the research, two directions were chosen, the first one being hypothesis testing based on proportion using the data gathered through an online survey. The second direction was conducting a simple regression test between admission scores and university grade point average using STATA program.

The online survey was conducted among 81 students of ADA University, who have cu-
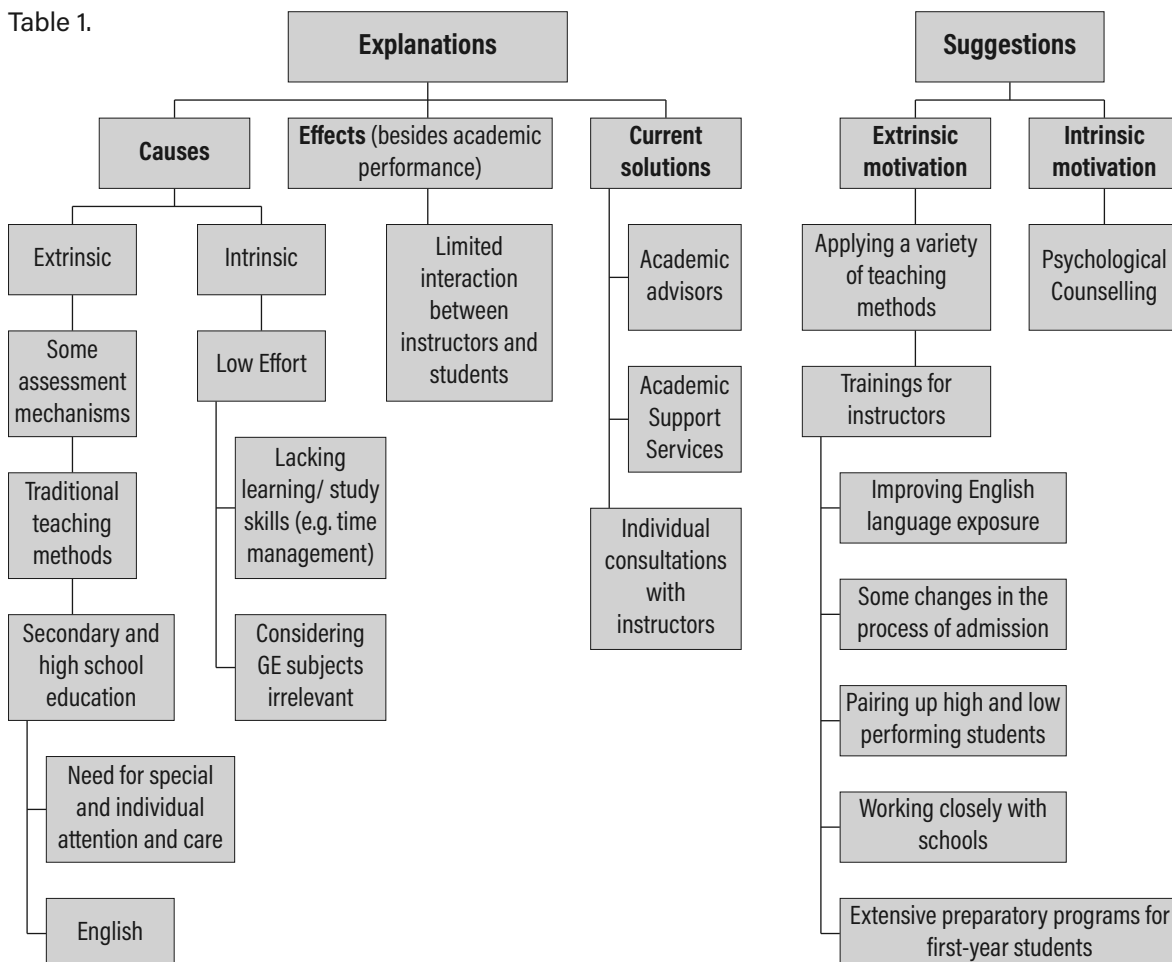
Table 1.

Table 2.

Hypothesis	Z test statistics	P-Value	Comment
H1a	— 0.257	0.8997	H1a was not supported
H1b	1.543	0.1229	H1b was not supported
H2	0.111	0.5438	H2 was not supported
H3	4.000	0.0001	H3 was supported
H4	— 2.172	0.9850	H4 was not supported
H5	— 0.360	0.2812	H5 was not supported
H6	N/A	N/A	H6 was not supported

Table 3.

Variable	Coefficient	P-Value	Standard Error	R-square	Number of Observations
SSAC exam score	0.00418***	0.00001	0.00023	0.1553	1731
Constant	0.51761***	0.00001	0.14315		

mulative GPA of 2.0 and below. Since the information on the student grades is protected by the policy of confidentiality of ADA University, the office of vice-rector acted as a gate keeper in this process and the email with a survey participation request was sent through them. The questions of the survey could be found Appendix 2.

As it was mentioned, hypothesis testing based on proportion was conducted to test the data based on the responses. The test conducted was a one population proportion test. Below the results could be found (Table 2).

As the table above shows only hypothesis 3 on previous educational background was supported. A follow up test i.e. a simple regression test on STATA program was conducted to validate the results. The test was based on the correlation of SSAC scores and grade point average of the undergraduate students. The test confirmed that there exists a strong positive relationship between SSAC scores and grade point average of the undergraduate students. It could be observed in the table 3.

In addition to these tests, based on the survey results on secondary and high schools of undergraduate students I conducted an analysis of the official rating of secondary schools of Azerbaijan and compared it with my own results. I utilized two documents to achieve this task i.e. a periodical of 2016 and 2017 published by State Examination Centre. The documents indicated the rating of the schools for the years of 2016 and 2017 based on their university admission results and final examinations for ninth-graders. It was revealed that the names of the schools which were in the majority among survey respondents (the schools which they finished) could not be found in either of the two documents. Also, to the survey question 'Did your secondary school provide you with necessary knowledge and skills for studying at ADA University?'

90% of the graduates of these schools answered 'no' and 'somehow'.

Discussion and Conclusion

This section discusses the findings of the qualitative and quantitative research with reference to the six research hypotheses initially proposed. As a result of the qualitative research, eight determining factors of poor academic performance of undergraduate students of ADA University were identified. I grouped them into two categories based on the theory of motivation on Self-Determination i.e. extrinsic and intrinsic motivation. Here, by 'extrinsic motivation', I imply support and influence provided by university as well as the parents of undergraduate students, and knowledge and skills having been acquired in the years of pre-tertiary education. Accordingly, by 'intrinsic motivation', I suppose intrinsic inclination of students towards academic performance such as wishing to study at this specific university, being psychologically ready for the challenges imposed by university study.

The revealed extrinsic factors include some assessment mechanisms of the University, traditional teaching methods, secondary and high school education, need for individualized teaching practices, and the English language. The intrinsic category, in its turn, includes low effort of undergraduate students of ADA University, lacking learning and study skills, and considering General Education subjects irrelevant.

However, the quantitative analysis based on population proportion test, confirmed only one of these determining factors i.e. secondary and high school education, which was reviewed as an extrinsic factor. For robustness, a follow-up test (a simple regression test) was conducted to see the relationship between admission results and grade point average of undergraduate students. The results of the test showed that admission results are strongly and positively correlated with grade point average of undergraduate students i.e. the higher their admission score is, the higher grade point average they have. In addition, the analysis of the report on the results of schools was used to see whether the students with low grade point average at university belong to schools with a low rating on university admission and final examinations for ninth-graders. The school which was in the majority could not be found in the rating of State Examination Centre on high achieving schools of the country.

These results corroborate with the academic findings of several research works having been conducted previously. For instance, the results on the effects of previous academic results are in line with the findings of Anderson, Dwayne, & Melvyn (1994), Messinis & Sheehan (2015), Niu & Tienda, (2009), Oksanen & Byron (1975), Mora & Escardibul (2008). In addition, the results of the simple regression test on admission results correspond to the findings by Dunlap, Henley, & Fraser (1998), Gupta (2015), and Mercer & Puddey (2011), who also confirmed the predictive validity of admission results.

With regards to the second research question, first and foremost, it should be highlighted that it was considerably challenging to identify the dominant determining factor of poor academic performance of ADA University students. Although in the interviews, I revealed more extrinsic factors in comparison with intrinsic factors, it would be mistaken to identify the dominant factor based only on the number of the mentioned determinants. Because the weight and importance that the interviewees put on several determinants differed greatly from each other. However, the quantitative analysis based on proportion testing showed that educational background is the dominant factor for undergraduate students. Generally, it is very cumbersome to provide a definite answer to this research question.

Concerning the third and fourth questions of the research, several suggestions as well as

implications have been generated as a result of this work. I will use the suggestions provided by my interview respondents and will add my own suggestions created based on the results of the whole research.

Limitations

In spite of the fact that the present research work did reach its purposes, there were some limitations of the study. First of all, due to the limited time, it was impossible to review all determinants of academic performance mentioned in the existing literature. Also, because of the same reason, I could not conduct interviews with students to acquire better insights into their perspectives and perceptions. In addition, quantitative research could have been conducted utilizing both high achievers' and low achievers' data.

Besides, it should be noted that the results concerning secondary and high schools of the country should be treated with precaution due to the existing practice of university preparation tutoring, which considerable popular and wide-spread in the country.

Suggestions, Implications And Recommendations

As a result of the present research work, several suggestions could be proposed with regards to the improvement of the issue of low academic performance at ADA University. The suggestions proposed will attempt to cover both the utilized literature sources and interview responses. In addition, this section will attempt to answer the 'So what?' question by presenting several implications of the present research work for the broader context of Azerbaijani education.

Intrinsic Motivation for Students

To intrinsically motivate undergraduate students and support them, I believe it is imperative to understand their internal problems and psychological state. In this term, the suggestion having been proposed by several interviewees seems to be a very sensible one i.e. organizing psychological counselling for university students and encouraging them to attend this counselling without hesitation in case of any need. In this manner, students such as Murad could better overcome their academic struggles and/ or determine their direction in life. In addition, it is equally important that psychological counselling work closely with various schools of the University (for instance, with academic advisers of each school), to foster a more effective work towards improving academic results of students.

Similarly, students should also be involved into trainings to work on their learning/ study skills. As it was mentioned in the interviews, one of the intrinsic reasons of low academic performance of undergraduate students was lacking learning and/or studying skills. Such trainings could be organized on time management, self-improvement, and organizational skills.

Extrinsic Motivation for Students

Moreover, from the results of the present research, it was clear that the academic experience obtained at secondary and high schools usually turns out to be one of the key players in determining undergraduate students academic 'destiny' at universities. Particularly, students seem to find the system of education overly challenging at ADA University due to not experiencing and/ or being prepared to such 'Western-style' progressive educational practices. With this regard, the current research suggests that it would be desirable to initiate a closer collaboration of the University with secondary and high schools of the country as well as a more active promotion of the practices and values of the University at schools.

In addition to the abovementioned suggestions regarding the schools, it should be noted that since most ADA students seem to suffer mostly in mathematics-related courses, the

level of mathematics classes taught at schools might carry an alarming implication for secondary and high school education of the country.

Furthermore, the research found that instructors at ADA University seem to experience difficulties providing individualized teaching methodologies due large classes, for now the only solution being office hours and consultations for the students. Regarding this issue, it would be advisable to minimize class sizes to enable faculty to organize better 'individualized' classes.

Also, regarding the faculty, intensive trainings for the University faculty also seems to be a desirable activity for the improvement of academic performance of students. Particularly, the present study proposes the trainings to be organized based on the theory of Multiple Intelligences, to promote application of more individualized classes referring to varying learning styles. As the literature suggests (for example, Jones, 2017), curricullum based on varying learning styles could be a sensible solution to improve the effectiveness of lectures, and accordingly, academic performance of students.

Another suggestion regarding extrinsically motivating undergraduate students would be increasing the English language exposure of the students even after finishing EAPP Program to overcome the challenge of English in their studies. Here, however, I cannot propose any particular steps since I do not possess many insights and details into the problem. Future research could be done in this particular area to test and analyse the best practices for improving the level of the English language of ADA low performing students.

As another implication of the present research work, it should be stated that the current solutions provided by ADA University (for example, Student Academic Support Services, office hours and consultations) as well as the findings and suggestions of the current research work could serve as an effective lesson for other universities of the country where such practices are usually not applied.

For future research, it could be advisable to focus on the student insights by conducting in-depth interviews as well as focus groups with students. Also, as mentioned above, it suggested that future researchers look for the solutions of poor English language problem by gaining more details and insights into the issue.

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